

Quick Start Guide

Portable IoT Gateway

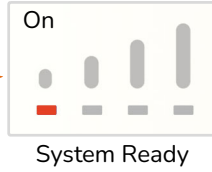
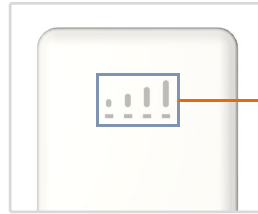
Pi7a



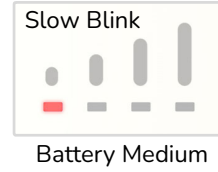
Power On/Off



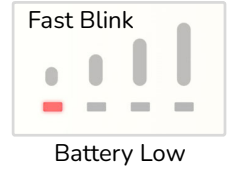
System Status



System Ready

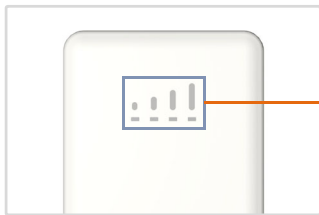


Battery Medium
(<60%, Configurable)

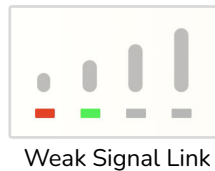


Battery Low
(<20%, Configurable)

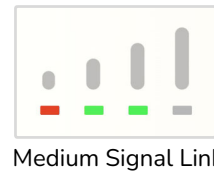
HaLow Link Status



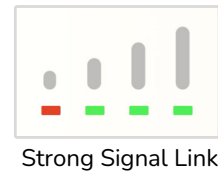
Blinking: No Link



Weak Signal Link



Medium Signal Link



Strong Signal Link

Battery Charging



Restart/Reset



Battery Replacement



Hardware Specifications

Enclosure

Size (WxDxH)	76 x 25 x 164 mm (2.99 x 0.98 x 6.46 in.)
Weight	x.xx kg (x.xx lb)
Temperature	Operating: -20° C to 50° C (-4° F to 122° F) Storage: -30° C to 70° C (-22° F to 158° F)
Humidity	Operating: 0% to 95% (non-condensing)
Waterproof Rating	IP56

Network Interfaces

Ports	USB-C: Power input
2.4 GHz Radio	IEEE 802.11b/g/n/ac/ax
HaLow Radio	IEEE 802.11ah
Bluetooth Radio	IEEE 802.15.1
Radio Frequencies	2.4–2.4835 GHz (US, Canada, ETSI, Japan, TW) HaLow (FCC): 902–928 MHz HaLow (CE): 863–868 MHz HaLow (JP): 920.6–928 MHz HaLow (TW): 920–925 MHz

Power Specifications

USB-C Input Power	5 VDC, 1 A
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Regulatory Compliances

Radio	EN300 328 V2.2.2 (2019-07) EN300 220-1 V3.1.1 (2017-02) EN300 220-2 V3.1.1 (201702) 47 CFR FCC Part 15.247 IC RSS-247 Issue 4 and RSS-Gen Issue 5 RSS-247 Issue 4 July. 2025 RSS-Gen, Issue 5 April 2018, Amendment 2 (February 2021) NCC LP0002 (2024-02-06) MIC Certification Rule, Article 2 Paragraph 1 Item 18 MIC Certification Rule, Article 2 Paragraph 1 Item 19 Terminal equipment design certification, Article 3, Article 4, Article 6, Article 9, and Article 34 regulations
Emissions	EN 301 489-1 V2.2.3 (2019-11) Class B EN 301 489-17 V3.3.1 (2024-09) 47 CFR FCC Rules and Regulations Part 15 Subpart B, Class B Digital Device ICES-003, Issue 7 Class B CNS 15936 Class B
Safety	Low Voltage Directive IEC 62368-1:2018; and/or EN IEC 62368-1:2020+A11:2020; and/or BS EN IEC 62368-1:2020+A11:2020 CNS 15598-1
RoHS	CNS 15663



Note: Purchased 18650 batteries must be rated at least 3.7 V / 2500 mAh.

Note: Purchased batteries must have a protruding positive terminal (button top), and it is recommended that they comply with applicable safety standards.

Note: The operating temperature during battery charging must follow the specifications of the battery purchased by the end user.

Safety and Regulatory Information

FCC Class B

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For product available in the USA/Canada market, only channel 1~11 can be operated. Selection of other channels is not possible.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This device has been tested and meets applicable limits for Radio Frequency (RF) exposure.

The local Specific Absorption Rate (SAR) quantifies the user's exposure to the electromagnetic waves of the equipment concerned. The maximum permitted SAR is 1.58 W/kg.

Carry this device at least 10 mm away from your body to ensure exposure levels remain at or below the as-tested levels.

Industry Canada

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil contient des émetteurs / récepteurs exempts de licence qui sont conformes au (x) RSS (s) exemptés de licence d'Innovation, Sciences et Développement économique Canada. L'opération est soumise aux deux conditions suivantes:

- (1) Cet appareil ne doit pas provoquer d'interférences.*
- (2) Cet appareil doit accepter toute interférence, y compris les interférences susceptibles de provoquer un fonctionnement indésirable de l'appareil.*

IMPORTANT NOTE:**IC Radiation Exposure Statement:**

This device has been tested and meets applicable limits for Radio Frequency (RF) exposure.

Cet appareil a été testé et respecte les limites applicables en matière d'exposition aux radiofréquences (RF).

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Le débit d'absorption spécifique (DAS) local quantifie l'exposition de l'utilisateur aux ondes électromagnétiques de l'équipement concerné. Le DAS maximal autorisé est de 1.58 W/kg.

Carry this device at least 10 mm away from your body to ensure exposure levels remain at or below the as-tested levels.

Maintenez cet appareil à une distance minimale de 10 mm de votre corps afin de garantir que les niveaux d'exposition restent inférieurs ou égaux aux niveaux testés.

This information technology equipment is in compliance with the Directive 2014/53/EU and Directive 2014/35/EU.

The Declaration of Conformity (DoC) can be obtained from Edgcore.

Antenna List

No.	Model No.	Application	Material/Type	Peak Gain
1	120G00000298A	HaLow	Metal, PIFA	900MHz: 1.56 dBi
2	142000004535A	Wi-Fi/BLE 2.4G	PIFA	3.6 dBi

Japan VCCI Statement

この装置は、クラスB機器です。この装置は、住宅環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。

取扱説明書に従って正しい取り扱いをして下さい。

VCCI – B

Warnings and Cautionary Messages

Warning: This product does not contain any serviceable user parts.

警告及注意訊息

警告：本產品不包含使用者可自行維修的零件。

CE Statement

This equipment complies with EU radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance **xx** cm between the radiator and your body.

All operational modes:

2.4 GHz: 802.11b, 802.11g, 802.11n (HT20), 802.11n (HT40), 802.11ac (VHT20), 802.11ac (VHT40), 802.11ax (HE20), 802.11ax (HE40)

BLE 2.4 GHz: 802.15.1

HaLow: 802.11ah

The frequency and maximum transmitted power limit in EU are listed as below:

2400–2483.5 MHz: 20 dBm

863–868 MHz: 14 dBm



AT	BE	BG	CH	CY	CZ
DE	DK	EE	EL	ES	FI
FR	HR	HU	IE	IS	IT
LI	LT	LU	LV	MT	NL
NO	PL	PT	RO	SE	SI
SK	TR	UK			

The abbreviations of the countries, as prescribed in above table, where any restrictions on putting into service or any requirements for authorization of use exist.



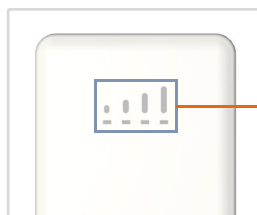
CE Mark Declaration of Conformance for EMI and Safety (EEC)



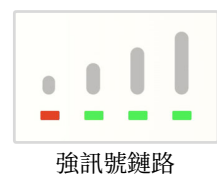
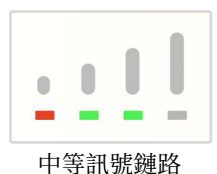
電源開/關



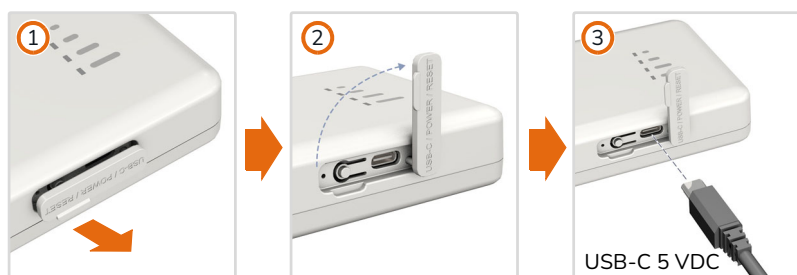
系統狀態



HaLow 連結狀態



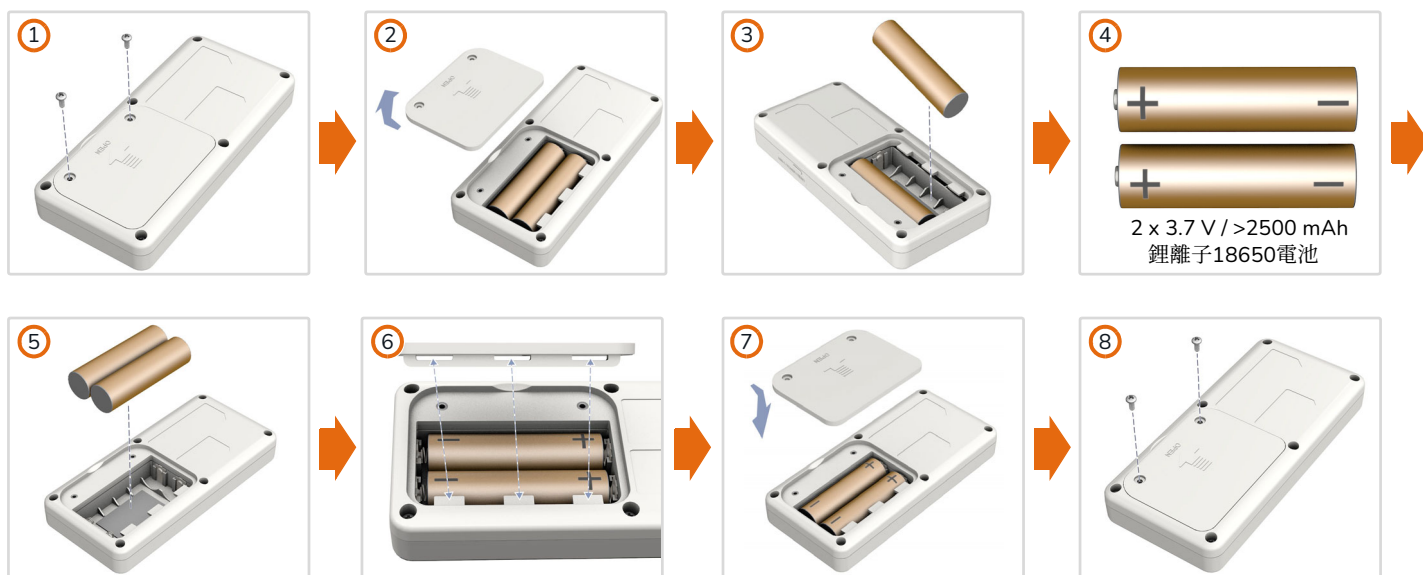
電池充電



重啟/重置



電池更換



硬體規格

外殼

尺寸（寬 x 深 x 高） 76 x 25 x 164 mm (2.99 x 0.98 x 6.46 in.)

重量 x.xx kg (x.xx lb)

溫度 操作：-20° C 至 50° C (-4° F 至 122° F)
儲存：-30° C 至 70° C (-22° F 至 158° F)

濕度 操作：0% 至 95%（無冷凝）

防水等級 IP56

網路介面

連接埠 USB-C: 電源輸入

2.4 GHz 無線電 IEEE 802.11b/g/n/ac/ax

HaLow 無線電 IEEE 802.11ah

藍牙無線電 IEEE 802.15.1

無線電頻率 2.4–2.4835 GHz (美國、加拿大、ETSI、日本、台灣)
HaLow (FCC): 902–928 MHz
HaLow (CE): 863–868 MHz
HaLow (JP): 920.6–928 MHz
HaLow (TW): 920–925 MHz

電源規格

USB-C 輸入電源 5 VDC, 1 A

符合法規

無線電 EN300 328 V2.2.2 (2019-07)
EN300 220-1 V3.1.1 (2017-02)
EN300 220-2 V3.1.1 (201702)
47 CFR FCC Part 15.247
IC RSS-247 Issue 4 and RSS-Gen Issue 5
RSS-247 Issue 4 July, 2025
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MIC Certification Rule, Article 2 Paragraph 1 Item 18
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CNS 15598-1

RoHS CNS 15663



附註： 所購18650電池的額定電壓必須至少為3.7V/容量2500mAh。

附註： 購買的電池必須有突出的正極（凸頭），並建議符合適用的安全標準。

附註： 電池充電期間的工作溫度必須符合最終用戶所購買電池的規格。

安全和監管訊息

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